ORIGINAL RESEARCH ARTICLES

DESIGN, SYNTHESIS, CHARACTERIZATION AND EVALUATION OF PHENOTHIAZINE DERIVATIVES OF BIOLOGICAL INTEREST

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ABSTRACT

This investigation aimed to create, describe and assess the pharmacological activity of derivatives of substituted phenothiazine. Reflux condensation was used to develop two chemicals. The synthesized compounds' purity was determined using TLC and the open capillary tube method was used to determine the melting point. IR spectroscopy was used to characterize them. There are several derivatives of substituted phenothiazine heterocyclic rings, however, very few of their practical uses are known. All the synthesized compounds' were assessed for antidepressant properties. Investigation of anti-depressant activity was conducted using despair swim test on Sprague-Dawley rats. The conventional control used in the spectral study was imipramine. In IR spectroscopy, each chemical had a distinctive peak. The promising antidepressant efficacy of these compounds may warrant further structural modifications to the primary molecule, as well as advanced research to discover new, potent antidepressants molecules.